ELECTRICAL COMMUNICATION INDEX, VOLUME 63 (1989)

Subject Index

	Number	Page
Advanced VLSI Components for Digital Cellular Mobile Radio, M. Rahier, D. Rabaey, and J. Dulongpont	4	409
Alcatel E10 Digital Switching Systems, Electronic Manufacturing of the System 12 and, Y. Derrien, A. Fraile, W. Hartl, and J. Ijsseldijk	2	145
Alcatel Submarine Telecommunication Systems: Tradition and Innovation, J. Devos	3	221
Architectural and Functional Model for Business Communication Systems, J-L. Pernin and T. Wichers	1	4
Business Communication Systems, Architectural and Functional Model for, J-L. Pernin and T. Wichers	1	4
Business Communication Systems, Manufacture of, G. W. Hasler	2	152
Cable for Submarine Telecommunication Systems, C. Reinaudo	3	226
Cable Network Engineering and Installation, Optical Fibre Videocommunication Networks:, J-P. Boinet	3	286
CCITT No 7 Network as the Basis for Advanced Public Network Services, E. Cambré and M. Smouts	4	306
Cellular Mobile Radio as an Intelligent Network Application, M. Ballard, E. Issenmann, and M. Moya Sanchez	4	389
Centrex Application, Digital, D. Taranne	1	57
Centrex in System 12, Implementation of ISDN Wide Area, K. P. Lathia	4	374
Commercial Introduction of the ECR 900, M. Böhm, H-H. Schulz, and C. Dechelette	4	383
Computer-Aided Manufacturing, Flexible Manufacturing Systems, and Simulation, P. Hurault, H. R. Kopa, and K. Kreft	2	99
Computer Assisted Network Engineering, C. Guthmann	3	279
Digital Centrex Application, D. Taranne	1	57
ECR 900, Commercial Introduction of the, M. Böhm, H-H. Schulz, and C. Dechelette	4	383
ECR 900 Digital Cellular Mobile Radio System, M. Ballard and D. Verhulst	1	45
Electronic Manufacturing of the System 12 and Alcatel E10 Digital Switching Systems, Y. Derrien, A. Fraile, W. Hartl, and J. Ijsseldijk	2	145
Experimental Fibre Optic Metropolitan Area Network for Florence University, P. Boscolo, S. Renault, and S. Susini	3	263
Experimental Installation of a Fibre Optic Ground Wire for High Voltage Power Lines, P. Laurenzi and G. Maraviglia	3	271
Expert Systems for Manufacturing and Testing Applications, W. Frank and B. Sauve	2	137
Facsimile: An Expanding Telecommunication Service, P. Nedellec	1	68
Fibre Optic Ground Wire for High Voltage Power Lines, Experimental Installation of a, P. Laurenzi and G. Maraviglia	3	271
Fibre Optic Metropolitan Area Network for Florence University, Experimental, P. Boscolo, S. Renault, and S. Susini	3	263
Fibre Optic Video Surveillance System for Milan Subway, P. Barzagli and P. Covoni	3	257
Fire and Rescue Services, SIGALE System for, F. Menet	1	52
From Research to Volume Production, E-J. Duhm and A. Wielockx	2	80
General Characteristics of Intelligent Networks, L. Alvarez Mazo, R. Larrocha, and M. Martin	4	314
Ground Wire for High Voltage Power Lines, Experimental Installation of a Fibre Optic, P. Laurenzi and G. Maraviglia	3	271
Implementation of ISDN Wide Area Centrex in System 12, K. P. Lathia	4	374
Implementation of the Intelligent Network in France, S. Goerlinger and B. Vilain	4	337
Importance and Impact of the Just-in-Time Philosophy, R. Aerts, P. Bech, and J-P. Le Friec	2	115
In-House ISDN Applications, F. Sévêque and T. Wichers	1	17
Intelligent Network Application, Cellular Mobile Radio as an, M. Ballard, E. Issenmann, and M. Moya Sanchez	4	389
Intelligent Network in France, Implementation of the, S. Goerlinger and B. Vilain	4	337
Intelligent Network Products, J-P. Euzen and J. B. Kérihuel	4	321
Intelligent Network Software Factory for Service Creation and Modification, J-C. Pennanec'h	4	345
Intelligent Networks, General Characteristics of, L. Alvarez Mazo, R. Larrocha, and M. Martin	4	314
Intelligent Networks, Services Offered by, X. du Vachat, R. Gruner, and L. Martinez-Amago	4	331
Introduction of Surface Mounted Device Technology, P. Meesemaecker, W. Rozumek, and R. Tarrieu	2	122
ISDN Applications, In-House, F. Sévêque and T. Wichers	1	17
ISDN Professional Service, R. Kopeikin	4	366
Just-in-Time Philosophy, Importance and Impact of the, R. Aerts, P. Bech, and J-P. Le Friec	2	115
Key Systems, Small Analogue and Digital PABXs and, R. Girault	1	25
Manufacture of Business Communication Systems, G. W. Hasler	2	152
Manufacture of Microwave Telecommunication Equipment, J-P. Chenu, G. Erdmann, and H. Müller	2	159
Manufacturing and Testing Applications, Expert Systems for, W. Frank and B. Sauve	2	137
Manufacturing, Flexible Manufacturing Systems, and Simulation, Computer-Aided, P. Hurault, H. R. Kopa, and K. Kreft	2	99
Manufacturing Optical Fibres for Telecommunication Systems, W. Kiesewetter	2	176
Manufacturing Planning and Control Systems, F. Bolay, A. Waldraff, and A. White	2	107
Metropolitan Area Network for Florence University, Experimental Fibre Optic, P. Boscolo, S. Renault, and S. Susini	3	263

Microwave System for Rural Telecommunication, RURTEL: A, H. K. Ligotky 3 200
Microwave Telecommunication Equipment, Manufacture of, J-P. Chenu, G. Erdmann, and H. Müller . . . 2 159
Minitel Factory: A Key Element in the Success of Videotex in France, W. Capiez 1 64
Mobile Radio, Advanced VLSI Components for Digital Cellular,
M. Rahier, D. Rabaey, and J. Dulongpont 4 409
Mobile Radio as an Intelligent Network Application, Cellular,
M. Ballard, E. Issenmann, and M. Moya Sanchez 4 389
Mobile Radio, System 900: The ISDN Approach to Cellular, W. Weiß and M. Wizgall 4 400
Mobile Radio System, ECR 900 Digital Cellular, M. Ballard and D. Verhulst 1 45

Network Engineering, Computer Assisted, C. Guthmann 3 279
Network Management, W. Böhm and G. Ullmann 1 10
New Generation of Low Capacity Optical Fibre Line Systems, F. Canal Cano and F. Fatuarte Torres 3 249
New Terminals for International Telex Communication, H. Gleisberg and M. Gutman 1 39

Optical Fibre Line Systems, New Generation of Low Capacity, F. Canal Cano and F. Fatuarte Torres . . . 3 249
Optical Fibres for Telecommunication Systems, Manufacturing, W. Kiesewetter 2 176
Optical Fibre Videocommunication Networks: Cable Network Engineering and Installation, J-P. Boinet . . 3 286
Optical Submarine Telecommunication System S560, J-P. Trezeguet 3 231
Optoelectronic Device Selection for Submarine Repeaters,
J-L. Boussois, J-L. Goudard, M. Gueguen, B. Kramer, and D. Sauvage 3 240
Overview, J. Vandamme 1 2
Overview, A. Wielockx 2 78
Overview, U. Ferroni and J. Imbert 3 190
Overview, J. Cornu 4 304

PABXs and Key Systems, Small Analogue and Digital, R. Girault 1 25
Planning and Control Systems, Manufacturing, F. Bolay, A. Waldraff, and A. White 2 107
Procurement and Standardisation of Components, J. M. Rice and J. van der Donk 2 86
Product Industrialisation, D. Maulay and J. Verspecht 2 93
Production, From Research to Volume, E-J. Duhm and A. Wielockx 2 80
Public Network Services, CCITT No 7 Network as the Basis for Advanced, E. Cambré and M. Smouts . . . 4 306

Quality Concept, Total, H. Lang and B. Lefebvre 2 183

Rural Applications, Switching Systems for, R. Cacheiro and J. Espantaleón 3 211
Rural Communication: Problems and Solutions, B. Culot, R. Cacheiro, J. Couet, and H. K. Ligotky 3 192
Rural Telecommunication, RURTEL: A Microwave System for, H. K. Ligotky 3 200
RURTEL: A Microwave System for Rural Telecommunication, H. K. Ligotky 3 200

Service Creation and Modification, Intelligent Network Software Factory for, J-C. Pennanec'h 4 345
Services Offered by Intelligent Networks, X. du Vachat, R. Gruner, and L. Martinez-Amago 4 331
SIGALE System for Fire and Rescue Services, F. Menet 1 52
Simulation, Computer-Aided Manufacturing, Flexible Manufacturing Systems, and,
P. Hurault, H. R. Kopa, and K. Kreft 2 99
Small Analogue and Digital PABXs and Key Systems, R. Girault 1 25
Software Factory for Service Creation and Modification, Intelligent Network, J-C. Pennanec'h 4 345
Software Manufacturing, E. Schatz and J. Wauters 2 168
Standardisation of Components, Procurement and, J. M. Rice and J. van der Donk 2 86
Standard Subsets, D. Andersen, A. Chataignon, and J-M. Grospierre 1 32
Submarine Repeaters, Optoelectronic Device Selection for,
J-L. Boussois, J-L. Goudard, M. Gueguen, B. Kramer, and D. Sauvage 3 240
Submarine Telecommunication Systems, Cable for, C. Reinaudo 3 226
Submarine Telecommunication Systems: Tradition and Innovation, Alcatel, J. Devos 3 221
Submarine Telecommunication System S560, Optical, J. P. Trezeguet 3 231
Subsets, Standard, D. Andersen, A. Chataignon, and J-M. Grospierre 1 32
Surface Mounted Device Technology, Introduction of, P. Meesemaecker, W. Rozumek, and R. Tarrieu . . 2 122
Switching Systems for Rural Applications, R. Cacheiro and J. Espantaleón 3 211
System 12 and Alcatel E10 Digital Switching Systems, Electronic Manufacturing of the,
Y. Derrien, A. Fraile, W. Hartl, and J. Ijsseldijk 2 145
System 900: The ISDN Approach to Cellular Mobile Radio, W. Weiß and M. Wizgall 4 400

Telecommunications Management Networks, M. Beyltjens, J-M. Cornille, R. Falkner, and B. Panigas . . . 4 356
Telecommunication Service, Facsimile: An Expanding, P. Nedellec 1 68
Telephone Network in Thailand, J. Swetchine 3 294
Telex Communication, New Terminals for International, H. Gleisberg and M. Gutman 1 39
Terminals for International Telex Communication, New, H. Gleisberg and M. Gutman 1 39
Testing Applications, Expert Systems for Manufacturing and, W. Frank and B. Sauve 2 137
Test Strategies, V. S. Andersen, G. Caratti, and F. Mertens 2 130
Total Quality Concept, H. Lang and B. Lefebvre 2 183

Videocommunication Networks: Cable Network Engineering and Installation, Optical Fibre, J-P. Boinet . . 3 286
Video Surveillance System for Milan Subway, Fibre Optic, P. Barzagli and P. Covoni 3 257
Videotex in France, Minitel Factory: A Key Element in the Success of, W. Capiez 1 64
VLSI Components for Digital Cellular Mobile Radio, Advanced,
M. Rahier, D. Rabaey, and J. Dulongpont 4 409

Wide Area Centrex in System 12, Implementation of ISDN, K. P. Lathia 4 374

ELECTRICAL COMMUNICATION INDEX, VOLUME 63 (1989)

Author Index

	Number	Page
Aerts, R., Bech, P., and Le Friec, J-P., Importance and Impact of the Just-in-Time Philosophy	2	115
Alvarez Mazo, L., Larrocha, R., and Martin, M., General Characteristics of Intelligent Networks	4	314
Andersen, D., Chataignon, A., and Grospierre, J-M., Standard Subsets	1	32
Andersen, V. S., Caratti, G., and Mertens, F. Test Strategies	2	130
Ballard, M., and Verhulst, D., ECR 900 Digital Cellular Mobile Radio System	1	45
Ballard, M., Issenmann, E., and Moya Sanchez, M., Cellular Mobile Radio as an Intelligent Network Application	4	389
Barzagli, P., and Covoni, P., Fibre Optic Video Surveillance System for Milan Subway	3	257
Bech, P., *see* Aerts, R.		
Beyltjens, M., Cornille, J-M., Falkner, R., and Panigas, B., Telecommunications Management Networks	4	356
Böhm, M., Schulz, H-H., and Dechelette, C., Commercial Introduction of the ECR 900	4	383
Böhm, W., and Ullmann, G., Network Management	1	10
Boinet, J-P., Optical Fibre Videocommunication Networks: Cable Network Engineering and Installation	3	286
Bolay, F., Waldraff, A., and White, A., Manufacturing Planning and Control Systems	2	107
Boscolo, P., Renault, S., and Susini, S., Experimental Fibre Optic Metropolitan Area Network for Florence University	3	263
Boussois, J-L., Goudard, J-L., Gueguen, M., Kramer, B., and Sauvage, D., Optoelectronic Device Selection for Submarine Repeaters	3	240
Cacheiro, R., *see* Culot, B.		
Cacheiro, R., and Espantaleón, J., Switching Systems for Rural Applications	3	211
Cambré, E., and Smouts, M., CCITT No 7 Network as the Basis for Advanced Public Network Services	4	306
Canal Cano, F., and Fatuarte Torres, F., New Generation of Low Capacity Optical Fibre Line Systems	3	249
Capiez, W., Minitel Factory: A Key Element in the Success of Videotex in France	1	64
Caratti, G., *see* Andersen, V. S.		
Chataignon, A., *see* Andersen, D.		
Chenu, J-P., Erdmann, G., and Müller, H., Manufacture of Microwave Telecommunication Equipment	2	159
Cornille, J-M., *see* Beyltjens, M.		
Cornu, J., Overview	4	304
Couet, J., *see* Culot, B.		
Covoni, P., *see* Barzagli, P.		
Culot, B., Cacheiro, R., Couet, J., and Ligotky, H. K., Rural Communication: Problems and Solutions	3	192
Dechelette, C., *see* Böhm, M.		
Derrien, Y., Fraile, A., Hartl, W., and Ijsseldijk, J., Electronic Manufacturing of the System 12 and Alcatel E10 Digital Switching Systems	2	145
Devos, J., Alcatel Submarine Telecommunication Systems: Tradition and Innovation	3	221
Duhm, E-J., and Wielockx, A., From Research to Volume Production	2	80
Dulongpont, J., *see* Rahier, M.		
du Vachat, X., Gruner, R., and Martinez-Amago, L., Services Offered by Intelligent Networks	4	331
Erdmann, G., *see* Chenu, J-P.		
Espantaleón, J., *see* Cacheiro, R.		
Euzen, J-P., and Kérihuel, J. B., Intelligent Network Products	4	321
Falkner, R., *see* Beyltjens, M.		
Fatuarte Torres, F., *see* Canal Cano, F.		
Ferroni, U., and Imbert, J., Overview	3	190
Fraile, A., *see* Derrien, Y.		
Frank, W., and Sauve, B., Expert Systems for Manufacturing and Testing Applications	2	137
Girault, R., Small Analogue and Digital PABXs and Key Systems	1	25
Gleisberg, H., and Gutman, M., New Terminals for International Telex Communication	1	39
Goerlinger, S., and Vilain, B., Implementation of the Intelligent Network in France	4	337
Goudard, J-L., *see* Boussois, J-L.		
Grospierre, J-M., *see* Andersen, D.		
Gruner, R., *see* du Vachat, X.		
Gueguen, M., *see* Boussois, J-L.		
Guthmann, C., Computer Assisted Network Engineering	3	279
Gutman, M., *see* Gleisberg, H.		
Hartl, W., *see* Derrien, Y.		
Hasler, G. W., Manufacture of Business Communication Systems	2	152
Hurault, P., Kopa, H. R., and Kreft, K., Computer-Aided Manufacturing, Flexible Manufacturing Systems, and Simulation	2	99
Ijsseldijk, J., *see* Derrien, Y.		
Imbert, J., *see* Ferroni, U.		
Issenmann, E., *see* Ballard, M.		
Kérihuel, J. B., *see* Euzen, J-P.		
Kiesewetter, W., Manufacturing Optical Fibres for Telecommunication Systems	2	176
Kopa, H. R., *see* Hurault, P.		
Kopeikin, R., ISDN Professional Service	4	366
Kramer, B., *see* Boussois, J-L.		
Kreft, K., *see* Hurault, P.		
Lang, H., and Lefebvre, B., Total Quality Concept	2	183
Larrocha, R., *see* Alvarez Mazo, L.		
Lathia, K. P., Implementation of ISDN Wide Area Centrex in System 12	4	374
Laurenzi, P., and Maraviglia, G., Experimental Installation of a Fibre Optic Ground Wire for High Voltage Power Lines	3	271
Lefebvre, B., *see* Lang, H.		

Le Friec, J-P., *see* Aerts, R.
Ligotky, H. K., *see* Culot, B.
Ligotky, H. K., RURTEL: A Microwave System for Rural Telecommunication 3 200
Maraviglia, G., *see* Laurenzi, P.
Martin, M., *see* Alvarez Mazo, L.
Martinez-Amago, L., *see* du Vachat, X.
Maulay, D., and Verspecht, J., Product Industrialisation 2 93
Meesemaecker, P., Rozumek, W., and Tarrieu, R., Introduction of Surface Mounted Device Technology . . 2 122
Menet, F., SIGALE System for Fire and Rescue Services 1 52
Mertens, F., *see* Andersen, V. S.
Moya Sanchez, M., *see* Ballard, M.
Müller, H., *see* Chenu, J-P.
Nedellec, P., Facsimile: An Expanding Telecommunication Service 1 68
Panigas, B., *see* Beyltjens, M.
Pennanec'h, J-C., Intelligent Network Software Factory for Service Creation and Modification 4 345
Pernin, J-L., and Wichers, T.,
Architectural and Functional Model for Business Communication Systems 1 4
Rabaey, D., *see* Rahier, M.
Rahier, M., Rabaey, D., and Dulongpont, J.,
Advanced VLSI Components for Digital Cellular Mobile Radio 4 409
Reinaudo, C., Cable for Submarine Telecommunication Systems 3 226
Renault, S., *see* Boscolo, P.
Rice, J. M., and van der Donk, J., Procurement and Standardisation of Components 2 86
Rozumek, W., *see* Meesemaecker, P.
Sauvage, D., *see* Boussois, J-L.
Sauve, B., *see* Frank, W.
Schatz, E., and Wauters, J., Software Manufacturing 2 168
Schulz, H-H., *see* Böhm, M.
Sévêque, F., and Wichers, T., In-House ISDN Applications 1 17
Smouts, M., *see* Cambré, E.
Susini, S., *see* Boscolo, P.
Swetchine, J., Telephone Network in Thailand 3 294
Taranne, D., Digital Centrex Application 1 57
Tarrieu, R., *see* Meesemaecker, P.
Trezeguet, J. P., Optical Submarine Telecommunication System S560 . . . . . 3 231
Ullmann, G., *see* Böhm, W.
Vandamme, J., Overview 1 2
van der Donk, J., *see* Rice, J. M.
Verhulst, D., *see* Ballard, M.
Verspecht, J., *see* Maulay, D.
Vilain, B., *see* Goerlinger, S.
Waldraff, A., *see* Bolay, F.
Wauters, J., *see* Schatz, E.
Weiß, W., and Wizgall, M., System 900: The ISDN Approach to Cellular Mobile Radio 4 400
White, A., *see* Bolay, F.
Wichers, T., *see* Pernin, J-L.
Wichers, T., *see* Sévêque, F.
Wielockx, A., Overview 2 78
Wielockx, A., *see* Duhm, E-J.
Wizgall, M., *see* Weiß, W.